A LIST OF BIRDS OBSERVED AT SANTAREM, BRAZIL.

BY CLARENCE B. RIKER.

With Annotations by Frank M. Chapman.

[Concluded from p. 31.]

149. Momotus nattereri Scl.—Common; seen only in the lowlands.

[Three examples agree with a Bolivian specimen. This species has apparently not before been recorded from the Lower Amazon.—F. M. C.]

- 150. Ceryle torquata (Linn.).—Common.
- 151. Ceryle amazona (Lath.).—Common.
- 153. Ceryle americana (Gm.).—Common.
- [153. Ceryle superciliosa (Linn.). A female taken by Smith. F. M. C.]
- 154. Trogon melanurus Sw.—A female taken June 23 and a male July 8, 1889, near the river.

[The male has the throat, breast, and upper surface of a rich peacock-blue, deepest on the rump, and with comparatively slight trace of bronzy reflections.—F. M. C.]

- 155. Trogon viridis (Linn.).—Common; more abundant in the low-lands.
- [156. Trogon meridionalis Sw.—"Santarem, May 22; deep woods, rare."*]
- 157. Galbula rufoviridis Cab.—Very common along streams, sitting, Kingfisher-like, on projecting branches.
- [158. Galbula viridis Lath.—"Santarem, April 10; common near streams."*]
- 159. Galbula cyanicollis Cass.—A male taken June 16, 1887, was the only one seen.
 - 160. Bucco tectus (Bodd.).—A male taken July 1, 1887.
- 161. Bucco tamatia (Gm.).—A male and female taken July 11, 1887, in the forests of the lowlands.

[Indistinguishable from a Guianan specimen.—F. M. C.]

162. Bucco maculatus (Gm.).—A male and female taken July 14, 1884, on the campos.

[These examples agree with Bahia specimens. Apparently the species has not before been recorded from the Amazon.—F. M. C.]

- 163. Malacoptila rufa (S/ix).—A male taken June 13, 1887, in a dense forest twenty miles from the river.
- 164. Monasa morpheus (Hahn).—Common in dense forests on the 'mountain'.

^{*}Allen, Bull. Essex Inst., Vol. VIII, No. 8, 1876, p. 80.

165. Monasa nigrifrons (Spix).—A male taken June 22, 1887, near the river.

166. Chelidoptera tenebrosa (Pall.).—Common; congregating on dead trees.

[167. Crotophaga ani Linn.—Two specimens collected by Smith.—F. M. C.]

168. Crotophaga major Linn.—One specimen.

169. Piaya cayana pallescens (Cab.).—Common.

170. Piaya minuta (Vicill.).—A male, taken June 22, 1887, was the only one seen.

[171. Coccyzus euleri Cab.

Coccyzus liudeni Allen, Bull. Essex Inst., VIII, 1876, p. 78.

"Santarem, April 19, 1873" (l. c.).

Through the kindness of Mr. William Brewster, Assistant in Ornithology at the Museum of Comparative Zoölogy, I have been enabled to examine the type of *C. lindeni*. It agrees perfectly with a *Coccyzus* from Matto Grosso in the American Museum collection, which, being from the same general region as Cabanis's type, is very probably similar to the bird he described as *culeri*.—F. M. C.]

172. Rhamphastos erythrorhynchus (Gm.).—Common in the depths of the palm swamps.

173. Rhamphastos ariel Vig.—Very common everywhere.

[174. Pteroglossus aracari (Linn.).—"Santarem; common in the forests."*]

175. Pteroglossus wiedi Sturm.-Common.

176. Pteroglossus inscriptus Wagl.—Not common; two specimens taken on the 'mountain' in 1884; none seen in 1887.

177. Pteroglossus bitorquatus Vig.-Four specimens taken in 1884, none seen in 1887.

[178. Selenidera gouldi (Matt.).

*Sclenidera maculirostris Allen, Bull. Essex Inst., VIII, 1876, p. 81. A second lot of birds, received from Santarem through Mr. Southwick since the first part of this paper was published, contains, among others not in the collections previously mentioned, one example of this Toucan taken December 6, 1889.—F. M. C.]

179. Ara hyacinthina (Lath.).—Very rare; found only about the inland ponds in the dense forests of the interior where it feeds upon the fruit of a palm peculiar to these localities. I obtained three specimens wenty-five miles back from Santarem on June 10, 1887.

180. Ara chloroptera Gray.-Common.

[181. Ara ararauna (Linn.).—"Santarem." *]

[182. Ara maracana (Vieill.).—Three specimens taken in December, 1889, and January, 1890, are included in the second lot of Santarem birds received from Mr. Southwick.—F. M. C.]

183. Conurus pavua (Bodd.).-Five specimens taken in June, 1887.

^{*} Allen, Bull. Essex Inst., Vol. VIII, No. 8, 1876, p. 81.

184. Conurus aureus Gm.—A female taken July 19, 1884.

[185. Conurus roseifrons Gray.—Santarem, May 28; in small flocks.*]

186. Conurus cyanopterus (Bodd.).—Common in 1884, but none seen in 1887.

187. Brotogerys virescens (Gm.).—A male and female taken in July, 1884, on the campos back of Santarem.

188. Brotogerys tui (Gm.).—One specimen.

[189. Brotogerys tuipara (Gm.).—Two specimens collected by Smith in April, 1887.—F. M. C.]

190. Amazona festiva (Linn.).—A specimen taken in July, 1887.

[191. Amazona ochrocephala (Gm.).—Three specimens taken in January, 1890, received through Mr. Southwick.—F. M. C.]

192. Pionus menstruus (Linn.).-A male and female taken in July, 1884, in a dense forest on the 'mountain'.

193. Pionus violaceus (Bodd.).-A female taken August 5, 1884, in a dense forest on the 'mountain.'

[104. Pionopsitta brachyura (Temm.).— A male taken by Williams September 14, 1883.—F. M. C.]

195. Psittacula deliciosa Ridgw.

Psittacula deliciosa Ridgw., Proc. U. S. Nat Mus., X, 1887, p. 545; Auk, V, 1888, p. 461.

Three males and four females taken in June and July, 1887.

[Dr. Hartlaub, to whom I have sent specimens of this bird for comparison with his P. cyanochlora, writes me as follows concerning the relationships of the two species: "The Psittacula you have sent me is not Ps. cyanochlora Natt. (type specimen in our collection). The principal difference is this: in your bird the color of the tergum and uropygium has a strong bluish shade. In our cyanochlora (old) the color of these parts is most brilliant emerald green without the slightest bluish hue. A second difference is this: in your bird the blue on the wing occupies a much larger space, and for this reason is much more conspicuous and brilliant. In the beautifully stuffed specimen of our Ps. cyanochlora the blue on the wing is nearly invisible. The green color of the upper parts in our bird is a little more shaded with olivaceous than in yours There is no difference in the extent of the blue under the wing."-F. M. C.]

196. Lophostrix cristata (Daud.).—A female taken June 3, 1887, on the 'mountain.'

197. Pulsatrix torquata (Daud.).—A female taken July 8, 1887, in the lowlands.

198. Rupornis magnirostris nattereri (Scl.).—A female taken June 6, 1887, in the lowlands.

[Four specimens from Santarem prove on comparison with twenty odd examples of true nattereri from Matto Grosso to be clearly intermediate between that form and the northern magnirostris. In the grayish color of upper breast and throat they approach magnirostris, in the extent and

^{*} Allen, Bull. Essex Inst., Vol. VIII, No. 8, 1876, p. 81.

intensity of the rufous bars they are nearer nattereri, and 1 think they may be better referred to that subspecies.—F. M. C.]

[199. Asturina nitida (Lath.).—"Santarem, July 12; in deep woods."*]

200. Busarellus nigricollis (Lath.).—Common about the river, nesting in tall trees along the banks.

201. Heterospizias meridionalis (Lath.).—A female taken July 28, 1884, in the lowlands.

202. Urubitinga urubitinga (Gm.).—Common about meadows.

203. Spizaëtus manduyti (Daud.).— A specimen taken June 14, 1887, in the forest.

204. Accipiter bicolor (Vieill.).—An immature female taken June 21, 1887, in the lowlands.

205. Geranospiza cærulescens (Vieill.).—One specimen taken June 27, 1887, near the river.

206. Falco rufigularis Daud.—A specimen taken July 28, 1884, in the lowlands.

[207. Falco deiroleucus Temm.—One specimen taken by Smith.—F. M. C.]

208. Gampsonyx swainsoni Vig.—Common in the lowlands.

[209. Rostrhamus sociabilis (Vieill.).—An immature male taken by Williams July 25, 1883.—F. M. C.]

210. Leptodon cayennensis (Gm_*) .—An adult taken June 28, 1887 near the river.

211. Harpagus diodon (Temm.). — A male taken July 27, 1884; the stomach contained grass and insect remains.

212. Milvago chimachima (Vieill.).—An immature specimen taken June 27, 1887. in the lowlands.

213. Polyborus cheriway (Jacq.).—An adult taken near the river June 19, 1887.

[The specimen differs from Texan examples in having less white on the hind neck, interscapulars, and breast, and shows therefore not the slightest approach to *P. tharus*. So far as 1 am aware there is no previous record of this species south of the Amazon.—F. M. C.]

214. Cathartes aura (Linn.).—Very common.

215. Gyparchus papa (Linn.). — One specimen taken June 14, 1887, twenty miles from the river.

216. Ardea egretta (Gm.).—Very common.

217. Ardea candidissima (Gm.).—Common.

218. Ardea cyanurus (Vieill.).—An adult female taken June 17, 1887.

219. Tigrisoma brasiliense (Linn.).—One specimen.

[220. Zebrilus pumilus (Bodd.).—The second shipment received from Mr. Southwick contained one specimen of this rare Bittern, taken at Santarem, February 4, 1890.—F. M. C.]

221. Dendrocygna discolor Scl. & Salv.—Very common in flocks.

222. Cairina moschata (Linn.).-Common.

223. Columba speciosa Gm. Found only in flooded palm forests of the densest character.

^{*} Allen, Bull. Essex Inst., Vol. VIII, No. 8, 1876, p. 82.

Columba rufina (Temm.).—Common in the forests of the lowlands, feeding in large flocks amongst the fruit trees.

[224. Columba locutrix Wied.

Columba locutrix Wied, Reise Bras., II, 1821, p. 118; — Allen, Bull. A. M. N. H., II, 1889, p. 290.

A single specimen of this Dove, collected by Smith March 3, 1889, is with little doubt specifically identical with the type of Wied's Columba locutrix (A. M. N. H., No. 6442), and differs from it only in intensity of coloration. The upper surface is darker throughout, the outer margins of the primaries lack the slight grayish edging observable in Wied's specimen, and the lower parts of the Santarem birds are of a more glaucous-vinaceous hue. These differences may be subspecific, they may be seasonal, or they may be in part accounted for by the somewhat faded condition of Wied's type, which long exposure to light has evidently caused.— F. M. C.]

225. Zenaida jessicæ Riker.

Zenaida jessicæ RIKER MS., RIDGW., Proc. U. S. Nat. Mus., X, 1887, p. 527. The type was taken June 1, 1887, and two other specimens were taken from a flock feeding on the ground about a plantation.

226. Columbigallina passerina (Linn.).—Common about campos and clearings, in flocks of a dozen or more.

[South American specimens are certainly separable from the North American birds to which Linnæus's description of "rostro pedibusque flavis" evidently belongs. Lack of proper material, however, will not permit me to attempt to define the range and relationships of the two or more forms generally classed under the name passerina.—F. M. C.]

227. Columbigallina talpacoti (Temm.).—Not common.

228. Engyptila erythorothrax (Temm.).—Common on the campos; found nesting in July.

[229. Engyptila rufaxilla (Rich. & Bern.).—"Santarem, June 6; seen singly and apparently not common."*]

230. Geotrygon montana (Linn.).—Two specimens taken on the mountain' in 1887.

[231. Pipilo cumanensis (Jacq.).—"Santarem, May 10; deep woods, not common."*

232. Pipile cujubi (*Pelz*.).—Common on the 'mountain' about clearngs, usually in pairs or flocks; one specimen was taken July 26, 1884. The native name is *Cujubi*.

[233. Ortalida motmot (*Linu*.).—A specimen taken by Smith March 1, 1889, and a second received through Mr. Southwick collected January 14, 1890.—F. M. C.]

[234. Odontophorus guianensis (Gm.).—A specimen collected by Smith.—F. M. C.]

235. Opisthocomus cristatus (Lath.).—Very common along the river's banks.

^{*}Allen, Bull. Essex Inst., Vol. VIII, No. 8, 1876, p. 82.

236. Aramides cayennensis (Gm.).—Common along the river; often trapped by the natives.

237. Porzana cayennensis (Gm.).—Common in the marshes.

[238. Heliornis fulica (Bodd.).—One specimen taken by Williams.—F. M. C.]

239. Jacana jacana (Linn.).—Very common.

240. Vanellus cayenennsis (Gm.).—A male and female taken June 22, 1887.

241. Ægialitis collaris (Mill.).—A male taken June 24, 1887.

[242. Himantopus mexicanus (Müll.).—An adult collected by Smith April 16, 1889.—F. M. C.]

[243. Gallinago frenata (Licht.).—Four specimens collected by Smith in March and April, 1889.—F. M. C.]

[244. Actitis macularia (Linn.).

Tringoides macularis Allen, Bull. Essex Inst., VIII, 8, 1876, p. 83.

"Santarem, April 12; common along the river banks. Specimens were obtained both in mature and immature plumage." (Allen, l. c.).]

[245. Phæthusa magnirostris (*Licht*.).—A specimen collected by Smith March 3, 1889.—F. M. C.]

[246. Tinamus guttatus Pelz.—A specimen collected by Smith February 4, 1889, I refer provisionally to this species. It differs from an Upper Amazonian example identified by Mr. Salvin as "T. guttatus, but with fewer black marks on the lower back," in being less rufous and more olivaceous above, in having all the feathers of the back, rump, wing and tail-coverts banded subterminally with black and spotted with pale rufous, these spots growing more numerous posteriorly. In the coloration of the lower parts, and in size the two specimens agree.—F. M. C.]

247. Tinamus tao (Temm.).—One specimen taken August 5, 1884, in a dense forest on the 'mountain.'

248. Crypturus pileatus (Bodd.).—Common in the lowlands; its strange note heard only about sunset.

[249. Crypturus cinereus (Gm.).—"Santarem, July 6; common in deed woods."*]

250. Crypturus parvirostris Wagl.—Common amongst clumps of bushes on the campos; acting very much like a Quail, and as difficult to shoot

[A female taken June 14, 1884, the only specimen received, I refer with some hesitation to this species of which I have no examples for comparison. In coloration it apparently agrees with descriptions of parvirostris, but there is a great discrepancy in the measurements given by Taczanowski (Orn. Peru, III, p. 299) for this species and the measurements of the present specimen, as the following figures show:

C. parvirostris, Q, (ex Tacz.), wing 118 mm.; bill 23 mm.; tarsus 25 mm.

Santarem specimen, wing 103 mm.; bill 16 mm.; tarsus 25 mm.

^{*}Allen, Bull. Essex Inst., Vol. VIII, No. 8, 1876, p. 83.

It is very probable this bird may prove to be an as yet undescribed form of parvirostris from the Lower Amazon.—F. M. C.]

[251. Crypturus sp. nov.?—A specimen of Crypturus collected by Smith March 29, 1889, I am unable to identify with any described species. I hesitate, however to add to the confusion which exists in this group by naming a species which lack of material for comparison would not permit me properly to characterize. For the present, therefore, I simply give the following brief description:

Crown, hind neck, and upper back vinaceous-brown; lower back, rump, upper tail-coverts, tail, greater and lesser wing-coverts, black or brownish black barred with buffy; wings brownish black, the secondaries with buffy spots on their outer webs; throat ochraceous-buff; neck and breast cinereous with a slight brownish wash; flanks blackish, barred with buffy; centre of the abdomen white; under tail-coverts light rufous with black vermiculations. Wing, 6.50; tarsus, 1.80; culmen, 1.20 inches.—F. M. C.]

SUMMER BIRDS OF THE BRAS D'OR REGION OF CAPE BRETON ISLAND, NOVA SCOTIA.

BY FRANCIS II. ALLEN.

IN 'THE AUK' for January, 1887, (Vol. IV, p. 13) appeared an article with the above title by Mr. Jonathan Dwight, Jr. Mr. Dwight's observations were conducted from Aug. 4 to Aug. 16, principally in the immediate vicinity of Baddeck. I may be permitted to make some additions to his list based on my own observations from June 4 to June 12, 1890. My time was much too short and too much occupied with other things to make as careful an investigation as should have been made. Therefore, in spite of the fact that my visit was at a much more favorable time of year than Mr. Dwight's, my list numbers only fifty-five species. His list numbers fifty-nine, but four of them, Tringa minutilla, Ereunctes pusillus, Totanus flavipes, and Arenaria interpres, I think it is safe to say were migrants. Another species, Rallus virginianus, is marked by an interrogation point, indicating some uncertainty as to its occurrence. Of the fifty-four remaining species, seventeen are not on my list, and, what is still more surprising, eighteen which I observed are not